Jameco Page number 138991

DIP SWITCH

# ETD/ETA/ETS SERIES

**TRI-STATE TYPE**

ETA

PATENT NO: 5065276 (U.S.A.)
51892
47618
4856189 (U.S.A.)

## FEATURES

- With three states (1, open, 0) setting function, especially suitable for encoding/decoding of tri-state encoder/decoder integrated circuit to obtain more security codes than traditional two-state (1,0) operation. For instance, 9 bits with tri-state gets 19,683 (3%r9%r) codes while two-state gets 512 (2%r9%r) codes, gains 38 times in former!
- Bottom sealed standard to ensure free of flux immersion during wave soldering.
- All materials are UL 94V0 grade fire retardant plastics.
- Gold plated contact to ensure low contact resistance and tin plated terminal to prevent contamination during soldering.
- Twin contact designed to ensure stable contact.
- Ideal for coding of tele-communication, transceiving, remote control and burglar alarm systems which use integrated circuits with tri-state coding system.

## SPECIFICATIONS

*1 ELECTRICAL*

| | |
|---|---|
| · Contact Rating Switching | 25mA, 24VDC |
| Non-Switching | 100mA, 50VDC |
| · Contact Resistance Initial | 50mO Max. |
| After life test | 100mO Max. |
| · Insulation Resistance | 1,000MO min. at 100VDC |
| · Dielectric Strength | 500VDC min. for 1 minute |

· Capacitance between adjacent switches 5pF Max.

*2 MECHANICAL AND ENVIRONMENTAL*

| | |
|---|---|
| · Temperature Rating | |
| Operating | -25°C to + 70°C |
| Storage | -40°C to + 85°C |
| · Operation force | 800g Max. |
| · Operation Life | 2,000 Operations |
| · Humidity | 95% RH, 40°C for 96 Hrs. |
| · Vibration | Per MIL-STD-202F, Method 204D |
| · Solderability | After flux 230±5°C for 5±0.5 second 95% coverage |
| · Soldering Heat | For ETA, ETD Type<br>260±5°C for 5±1 second<br>For ETS Type<br>260±5°C for 10±1 second<br>280±5°C for 2±0.5 second<br>(Resistance to IR Reflow Soldering Heat) |

## DIMENSIONS AND CIRCUITRY

*ETD*

*DIMENSION A* *Unit: mm (inch)*

| Positions | 4 | 5 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|
| A | 15.30 (0.602) | 17.84 (0.702) | 22.92 (0.902) | 25.46 (1.002) | 28.00 (1.102) | 30.54 (1.202) |